CLAIMS

1. A method for tracking multiple SKUs of contact lenses in a manufacturing line comprising the steps of:

a) moulding a plurality of contact lenses,

b) providing a plurality of carriers each having a carrier indicator,

c) inspecting each contact lens to determine information relating to its prescription,

d) transferring each lens to a carrier,

e) reading the carrier indicator of the carrier of step d) and

f) storing in machine-accessible memory the information associated with the carrier indicator of the carrier of step (e) and the information relating to the lens for step (c).

2. A method for tracking multiple SKUs as claimed in Claim 1 in which identifiable marks indicative of the prescription of the lens are moulded into the contact lenses and said identifiable marks are read during the inspection to determine information relating to the prescription of the lens.

3. A method as claimed in Claim 1 or Claim 2 in which the lens is inspected by directing structured light at the entire 360° peripheral edge of the lens such that the structured light enters the lens at the peripheral edge thereof and internally reflects within the lens, and wherein the internally reflected light diffracts upon encountering a marking on the lens, whereby clear areas of the lens appear dark due to said internal light reflection, and one or more markings on the lens appear bright due to said internally reflected light scattering and exiting the lens at said one or more markings.

4. A method for tracking multiple SKUs as claimed in any one of Claims 1 to 3 in which each contact lens is inspected with a digital camera having associated image processing technology.

5. A method for tracking multiple SKUs as claimed in any preceding Claim in which the information relating to the lens prescription is compared to

information stored in a production database to determine whether the lens meets the correct prescription for the current SKU.

6. A method for tracking multiple SKUs as claimed in Claim 5 in which if the information relating to the prescription of the lens does not conform with the current SKU the information is compared against information in the production database relating to the next SKU.

7. A method for tracking multiple SKUs as claimed in Claim 6 in which the inspection determines the lens is part of the next SKU and the start of the next SKU is triggered and the lens is transferred to a new carrier.

8. A method for tracking multiple SKUs as claimed in Claim 6 or Claim 7 in which the inspection system is adjusted to detect a plurality of consecutive lenses having an identical prescription before the next SKU is triggered.

9. A method for tracking multiple SKUs as claimed in Claim 8 in which the inspection system is adjusted to detect at least 3 consecutive lenses having an identical prescription before the next SKU is triggered.

10. A method for tracking multiple SKUs as claimed in Claims 6 to 9 in which the inspection system counts the number of consecutive lens of the same prescription and compares the count to information in the production database relating to the number of lens in the SKU to determine the end of the SKU.

11. A method for tracking multiple SKUs as claimed in any one of Claims 6 to 10 in which at least one empty carrier is inserted between the carrier of one SKU and the carrier of the next SKU.

12. A method for tracking multiple SKUs as claimed in any preceding claim in which the inspection additionally checks for flaws.

13. A method for tracking multiple SKUs as claimed in any preceding claim in which if the information relating to the lens prescription is not in accordance with the current or next SKU and/or the inspection detects a flaw, the lens is transferred to a reject bin.

14. A method as claimed in any preceding claim in which the contact lenses are toric contact lenses.

15. A method as claimed in Claim 14 in which consecutive SKUs are toric contact lenses of the same power and have a difference in toric angle of at least 10°.

16. A method as claimed in Claim 14 in which consecutive SKUs are toric contact lenses of the same power and have a difference in toric angle of at least 30°.